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Appln. Ser. No. 10/815,605
 Amdt. Dated October 21, 2008
 Reply to Office Action dated April 22, 2008

APP 1478

The following listing of Claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1 – 4. Canceled

5 (previously submitted). A method of optimizing download rate to a mobile host from an application server in a telecommunications network, said method comprising:

providing an information gateway between said mobile host and said application server capable of adjusting said download rate;

measuring a throughput rate using the following equation

$R(\tau) = M / \Delta t$, wherein $R(\tau)$ is the measured throughput rate, Δt is a measurement time interval, τ be a current measurement time and M is the number of messages that arrive during the time interval;

calculating an estimated throughput rate for an application flow using the following equation

$\hat{R}(\tau) = \alpha(\tau) R(\tau) + (1 - \alpha(\tau)) E[R_{\tau-\Delta t}]$, wherein the estimated value $E[R_{\tau-\Delta t}]$ is a weighted average of the current measured value and the average of the last $K-1$ measured values where K is the index of the current measured value, and weight value $\alpha(\tau)$ is an average fractional difference between consecutive measurements points;

calculating the difference between said measured throughput rate and said estimated throughput rate and if said difference is less than a predetermined sensitivity parameter, then increasing said download rate through said information gateway by a predetermined incremental amount.

6 (Original). A method according to claim 5, wherein said predetermined incremental amount is less than said predetermined sensitivity parameter.

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7 (Original). A method according to claim 5, wherein said step of calculating an estimated throughput rate is carried out at said information gateway.

8 (Original). A method according to claim 5, wherein said step of calculating an estimated throughput rate is carried out at said mobile host.

9 (Original). A method according to claim 5, wherein said step of calculating the difference is carried out at said information gateway.